### PATENT COOPERATION TREATY

| From the PATENT COOPERATION TREATY REC'D 18 AUG 2005   |  |                                  |                 |                    | IG 2005 |
|--|--|----------------------------------|-----------------|--------------------|---------|
| From the INTERNATIONAL SEARCHING AUT   |  | · }                              |                 | PCT                |         |
| To:  |  |                                  | PC4             | CET.               | FUI_    |
| LEITZINGER OY  |  |                                  | 101             | L                  |         |
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| 00180 Helsinki   | •  | INTERNATIO                       |                 |                    | ORITY   |
| Finland  | •  |                                  |                 |                    |         |
|  |  | - 1                              | (PCT Rule 43    | bis.1) .           |         |
|  |  |                                  |                 |                    |         |
|  |  | Date of mailing (day/month/year) | 13°             | <b>6 -08</b> - 200 | )5      |
| Applicant's or agent's file reference  |  | FOR FURTHER ACTION               |                 |                    |         |
| 16124PC RO   |  | See paragraph 2 below            |                 |                    |         |
| International application No.  | International filing da                                      | te (day/month/year)              | Priority date ( | day/month/year     | )       |
| PCT/FI2005/050105  | 23.03.2005   |                                  | 26.03.2004      |                    |         |
| International Patent Classification (IPC)  | or both national classif                                     | fication and IPC                 |                 |                    |         |
| B23B 41/04   |  |                                  |                 |                    |         |
| Applicant  |  |                                  |                 |                    |         |
| T-DRILL OY et al   |  |                                  |                 | :                  |         |
|  |  |                                  |                 |                    |         |
| This opinion contains indications rel  |  | tems:                            |                 |                    |         |
| Box No. I Basis of the op  | inion  |                                  |                 |                    |         |
| Box No. II Priority  |  |                                  |                 |                    |         |
| Box No. III Non-establishr   | nent of opinion with re                                      | gard to novelty, inventiv        | e step and indu | strial applicabil  | ity     |
| Box No. IV Lack of unity   | of invention   |                                  |                 |                    |         |
| Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement   |  |                                  |                 | rial               |         |
| l  |  |                                  |                 |                    |         |
| Box No. VII Certain defects  | Box No. VII Certain defects in the international application |                                  |                 |                    |         |
| Box No. VIII Certain observ  | ations on the internation                                    | nal application                  |                 |                    |         |
| 2. FURTHER ACTION  |  |                                  |                 |                    |         |
| If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. |  |                                  |                 |                    |         |
| If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.  For further opinions, see Form PCT/ISA/220.   |  |                                  |                 |                    |         |
| 1 of farmer opinions, seed out to office was.  |  |                                  |                 |                    |         |
| 3. For further details, see notes to Form PCT/ISA/220.   |  |                                  |                 |                    |         |
|  |  |                                  |                 |                    |         |
| Name and mailing address of the ISA/S  | E  | Authorized officer               |                 |                    |         |
| Patent- och registreringsverke<br>Box 5055   | t.   | m 1- 11 - 5:                     |                 |                    | ·       |
| S-102 42 STOCKHOLM   | Fredrik Strand/MP  |                                  |                 |                    |         |
| Facsimile No. +46 8 667 72 88  | 72 88 Telephone No. +46 8 782 25 00                          |                                  |                 |                    |         |

Form PCT/ISA/237 (cover sheet) (April 2005)

International application No.

PCT/FI2005/050105

| Box No. I Basis of this opinion   |
|---|
| 1. With regard to the language, this opinion has been established on the basis of:  the international application in the language in which it was filed a translation of the international application into, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).                               |
| 2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:  a. type of material  a sequence listing  table(s) related to the sequence listing  |
| b. format of material on paper in electronic form   |
| c. time of filing/furnishing  contained in the international application as filed.  filed together with the international application in electronic form.  furnished subsequently to this Authority for the purposes of search.   |
| In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished. |
| 4. Additional comments:   |
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International application No.
PCT/FI2005/050105

| Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |        |     |     |  |
|--|--------|-----|-----|--|
| 1. Statement   |        |     | •   |  |
| Novelty (N)  | Claims | 2-4 | YES |  |
| •  | Claims | 1   | No  |  |
| Inventive step (IS)  | Claims | •   | YES |  |
| 2  | Claims | 1-4 | N0  |  |
| Industrial applicability (IA)  | Claims | 1-4 | YES |  |
| manual approximation (and  | Claims |     | ио  |  |
|  |        |     |     |  |

#### 2. Citations and explanations:

#### Cited document:

D1: DE 3208211 A1 D2: US 4503693 A1

The invention relates to an apparatus for cutting an oval hole in the wall of a pipe. The primary object of the invention is to provide an improved and simpler apparatus, which also is readily adjustable, for cutting an oval hole.

Document D1 represents closest background art.

#### Claim 1

Document D1 reveals an apparatus (fig. 1) for cutting an oval hole in the wall of a pipe. It comprises a power unit (10), a spindle (3) with gear drive and a cutting tool (2), essentially according to the preamble of the claim. In order to perform an elliptic movement of the cutting tool, the tool also comprises a disc (13) with a cam and an adjustable roller (14). The cam is shaped to provide the required axial displacement of the spindle during a full spindle revolution. This will result in an elliptical hole.

Consequently, the claims lack novelty.

For a further example see document D2 where an apparatus (fig. 2) which is able to cut oval holes in the wall of a pipe is revealed.

#### Claims 2-4

According to what is revealed through document D1 together

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International application No.
PCT/FI2005/050105

Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of: BOX V

with general knowledge in the field, the statements in claims 2-4 seam to be solutions obvious to the person skilled in the art.

Therefore, the claims lack inventive step.

According to the arguments stated above, the invention according to claim 1 lacks novelty but claims 2-4 are novel. Claims 1-4 are not considered to involve an inventive step. The invention according to claims 1-4 is considered to be industrially applicable.

### PATENT COOPERATION TREATY

| From the INTERNATIONAL SEARCHING AUT   | THORITY   |  | REC'D 18 AUG 2005  |  |  |
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| To:  | 1101011   |  | WIFO PCT   |  |  |
|  |   |  | PCT  |  |  |
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| 00180 Helsinki   | •   |  | NAL SEARCHING AUTHORITY  |  |  |
| Finland  |   |  |  |  |  |
|  |   | •  | (PCT Rule 43 <i>bis</i> .1) .  |  |  |
|  |   |  |  |  |  |
|  |   | Date of mailing                                      | <b>6.0</b> 00 200r   |  |  |
|  |   | (day/month/year)                                     | <b>1</b> 6 -08- 2005   |  |  |
| Applicant's or agent's file reference  |   | FOR FURTHER ACTION                                   |  |  |  |
| 16124PC RO   | •   |  | See paragraph 2 below  |  |  |
| International application No.  | International filing date   | e (day/month/year)                                   | Priority date (day/month/year)   |  |  |
| PCT/F12005/050105  | 23.03.2005  | 26.03.2004   |  |  |  |
| International Patent Classification (IPC)  | or both national classifi   | cation and IPC                                       |  |  |  |
| B23B 41/04   |   | •  |  |  |  |
| Applicant  |   |  |  |  |  |
| T-DRILL OY et al   |   |  |  |  |  |
|  |   |  | 1  |  |  |
| 1. This opinion contains indications re  |   | ems:   | İ  |  |  |
| Box No. I Basis of the op  | vinion  |  |  |  |  |
| Box No. II Priority  | Box No. II Priority   |  |  |  |  |
| Box No. III Non-establish  | ment of opinion with reg  | ard to novelty, inventiv                             | e step and industrial applicability  |  |  |
| Box No. IV Lack of unity   | o. IV Lack of unity of invention  |  |  |  |  |
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| Box No. VIII Certain observ  | /ations on the memator  | iai appiioauon                                       |  |  |  |
| 2. FURTHER ACTION  |   |  | · ·  |  |  |
| If a demand for international prelim   | inary examination is ma   | de, this opinion will be                             | considered to be a written opinion of the  |  |  |
| International Preliminary Examinin   | g Authority ("IPEA") ex   | ccept that this does not<br>EA has notified the Inte | apply where the applicant chooses an mational Bureau under Rule 66.1 <i>bis</i> (b) that |  |  |
| written opinions of this Internationa  | al Searching Authority w  | vill not be so considered                            | 1.   |  |  |
| If this opinion is, as provided above  | e, considered to be a wri   | tten opinion of the IPE                              | A, the applicant is invited to submit to the   |  |  |
| IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. |   |  |  |  |  |
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| 3. For further details, see notes to Form PCT/ISA/220.   |   |  |  |  |  |
|  |   |  |  |  |  |
| - 1 2 11 Cd TOAK   |   | Authorized officer                                   |  |  |  |
| Name and mailing address of the ISA/<br>Patent- och registreringsverk  | et  | Authorized officer                                   |  |  |  |
| Box 5055<br>S-102 42 STOCKHOLM   |   | Fredrik Strand/MP                                    |  |  |  |
| D : 1.31 .46 0 667 72 99   | •   | Telephone No. +46                                    | 8 782 25 00  |  |  |

Form PCT/ISA/237 (cover sheet) (April 2005)

International application No.

PCT/F12005/050105

| Box No. I Basis of this opinion   |
|---|
| 1. With regard to the language, this opinion has been established on the basis of:  the international application in the language in which it was filed  a translation of the international application into, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).                              |
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| c. time of filing/furnishing  contained in the international application as filed.  filed together with the international application in electronic form.  furnished subsequently to this Authority for the purposes of search.   |
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International application No.
PCT/FI2005/050105

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|--|--------------------------|--------|-----|-----|
| 1. Statemen  | ıt                       |        |     |     |
| Novel  | ty (N)                   | Claims | 2-4 | YES |
|  |                          | Claims | 1   | NO  |
| Inven  | tive step (IS)           | Claims |     | YES |
|  | ,                        | Claims | 1-4 | NO  |
| Indus  | trial applicability (IA) | Claims | 1-4 | YES |
| And and approximation of the second  | Claims                   |        | ио  |     |
|  |                          |        |     |     |

### 2. Citations and explanations:

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Claims 2-4 According to what is revealed through document D1 together

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International application No.
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Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of: Box  $\,V\,$ 

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